Stage Children. See page 322.

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &C.

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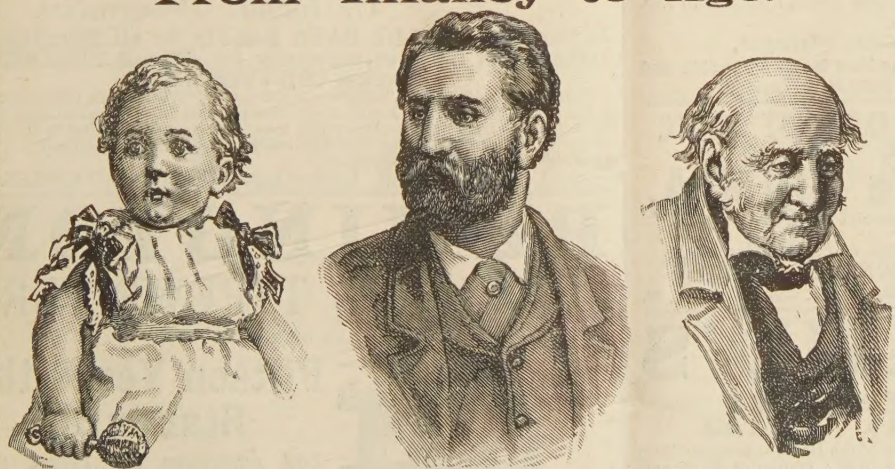

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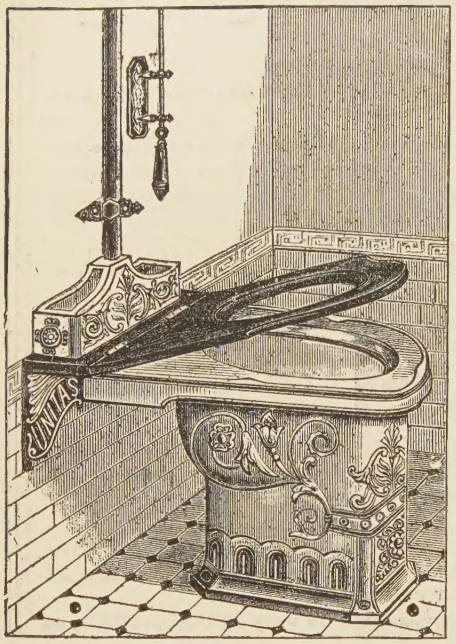

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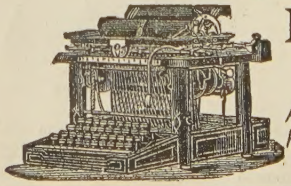

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◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, AUGUST* 23, 1889.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

IN connection with Dr. Hammond's article on ice-water, published in HEALTH for July 19th, the following remarks will be perused with interest:—In the opinion of the editor of the *Sanitary Volunteer*, the official organ of the New Hampshire Board of Health, there is a great deal of sentiment and many opinions regarding the use of ice-water that vanish when the light of reason and experience is turned upon them. The fact is, that ice-water, drank slowly and in moderate quantities, constitutes a healthful and invigorating drink. There is no doubt that ice is a great sanitary agent, and every family ought to be provided with it during the warmer months of the year. It is true that inordinate use of ice-water, or its use under some special conditions and circumstances, is attended with great danger: so is the improper use of any other drink or food. The assumption that iced water is dangerous, and that iced tea, or iced coffee, or iced lemonade is a harmless substitute, is simply a delusion. As the source of danger feared by some is the degree of cold, we fail to see clearly how flavour modifies the effect of temperature. There are some individuals, undoubtedly, who cannot drink ice-water without injury, and who ought never to use it; but to the great majority of persons it is refreshing and healthful. Its use, temperate and discreet, is in no way to be condemned, which cannot be said of some of its substitutes. But one may inquire, what about the risks of disease from germs preserved in ice?

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A WRITER has described the experiences of a gentleman who placed himself under the influence of hasheesh. He smoked it until he felt a profound sense of well-being, and then put the pipe aside. After a few minutes he seemed to become two persons; he was conscious of his real self reclining on a lounge, and of why he was there, his double was in a vast building of gold and marble, splendidly brilliant, and beautiful beyond all description. He felt an extreme gratification, and believed himself in heaven. This double personality suddenly vanished, but reappeared in a few minutes. His real self was undergoing rhythmical spasms throughout his body, the double was a marvellous instrument, producing sounds of exquisite sweetness and perfect rhythm. Then sleep ensued, and all ended.

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UPON another occasion sleep and waking came and went so rapidly that they seemed to be confused. His double seemed to be the sea, bright and tossing as the wind blew, then a continent. Again he smoked a double dose, and sat at his table pencil in hand to record the effects. He lost all conception of time. He rose to open a door, and it seemed to take a million years. He went to pacify an angry dog, and endless ages seemed to have passed when he returned. Conceptions of space retained their normal character. He felt an unusual fulness of mental impressions—enough to fill volumes. He understood clairvoyance, hypnotism, and all else. He was not one man or two, but several men living at the same time in different places with different occupations. He could not write one word without hurrying to the next, his thoughts flowing with enormous rapidity. The few words he did write meant nothing.

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THERE are ten good things to know says a contemporary, and they are as follows:—1. That salt will curdle new milk, hence in preparing milk porridge, gravies, &c, the salt should not be added until the dish is prepared. 2. That clear boiling water will remove tea stains and many fruit stains. Pour the water through the stain, and thus prevent its spreading over the fabric. 3. That ripe

CANCEROUS DISEASES.

TESTIMONIALS.

The following is from Dr. John Sheerer, St. Albans, Sept. 5th, 1888.

MR. JOHN M. YOUNG, *Manager Missisquoi Mineral Springs.*

DEAR SIR,—My mother, Mrs. Susan Sheerer, of Virgil, Cortland County, N.Y., was pronounced by Dr. Brunson, of said town, to have had a cancer in her breast in 1866. She used two cases of Missisquoi Water, and was cured. She is now eighty-two years old, and in splendid health. Yours truly,

JOHN SHEERER.

MISSISQUOI SPRINGS.

[An Extract from "The Monthly Homœopathic Review," May 1st, 1870.]

By Dr. TUTHILL MASSY.

The Missisquoi Springs of Franklin, County Vermont, are at present rather frequently prescribed in England for diseases where the knife was the severe medicine of other days: I therefore deem it my duty to lay before your readers the experience which I have gathered relative to these Springs.

* * * * * * * *

The Spring A, Missisquoi Springs, is the one most generally exported, and which I have frequently prescribed. It gave great comfort to a lady who was suffered from a large open cancer in the right breast; cleansed the surface, relieved the pain, induced sleep, and diminished the tendency to bleeding, when applied externally, like simple water dressing, and taken in half-tumbler doses twice a day.

The benefits of the Spring A were very remarkable in a lady burdened with an ovarian tumour containing much water, with considerable abdominal tenderness. A few bottles always reduced her great size, and relieved her mind from the dread of an operation which was once proposed.

PAMPHLET on application to the Sole Importers—

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AND OF ALL CHEMISTS.

tomatoes will remove ink and other stains from white cloth, also from the hands. 4. That a tablespoonful of turpentine boiled with white clothes will aid in the whitening process. 5. That boiled starch is much improved by the addition of a little sperm salt or gum arabic dissolved. 6. That beeswax and salt will make rusty flat irons as clean and smooth as glass. Tie a lump of wax in a rag and keep it for that purpose. When the irons are hot, rub them first with the wax rag, then scour with a paper or cloth sprinkled with salt. 7. That blue ointment and kerosene mixed in equal proportions and applied to the bedsteads is an unfailing bedbug remedy, as a coat of whitewash is for the walls of a log house. 8. That kerosene will soften boots or shoes that have been hardened by water, and render them as pliable as new. 9. That kerosene will make tin tea-kettles as bright as new. Saturate with a woollen rag and rub with it. It will also remove stains from varnished furniture. 10. That cool rain water and soda will remove machine grease from washable fabrics.

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I note that Mr. Stanley says the arrow poison used by the natives of the Lower Congo district is made from a species of red ant found in that locality. The ants are dried, crushed into powder, and cooked in palm oil. The exceedingly irritating properties of the poison are supposed to be due to formic acid, which is the cause of the pain of insects' stings at large.

✣ ✣ ✣

I observe that Dr. Lermuseau has brought before the Liége Medical Society some cases showing that a good many cases of colic, the origin of which is unsuspected, are in reality nothing but cases of lead poisoning. A large number of them, says a contemporary, are due to the practice of pumping up beer in public-houses through leaden pipes, or at least through pipes which contain a considerable proportion of lead. Publicans and others frequently drink this beer early in the morning on an empty stomach, and this habit is a most fruitful source of lead colic. Of course, in many cases, there is a blue line to be found on the gums, but sometimes this is absent, and then the diagnosis is very difficult. Occasionally the so-called method of Cicconardi may be useful in clearing up the diagnosis. It has been employed in Professor Rommelaere's wards, and consists in painting the surface of the skin covering the thorax with a six per cent. solution of sulphide of soda.

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If lead is present in the system a dark discolouration, caused by the formation of the sulphide, soon makes its appearance. Dr. Lermuseau complains of the apathy and incredulity of publicans even after their attention has been called to the danger of using leaden pipes for their beer—a danger from which the publican is usually the very first to suffer. It is urged that a stringent law ought to be passed entirely forbidding the use of leaden pipes for beer pumps. Dr. Lermuseau suggests the substitution of glass or hard rubber pipes, but these substances are less convenient, because they cannot be bent in all directions in the way that lead can. It would appear that, according to a law made in 1790, the Communal administrations have all along had ample power to deal with cases of this kind if they would only exercise it. Something more stringent is evidently necessary, and Dr. Lermuseau urges upon his *confrères* to bring all the pressure possible to bear upon members of the two Houses of Parliament in order to get some more satisfactory legislation on the subject.

Original Essays

"Life is not to live, but to be well."—*Martial.*

STAGE CHILDREN.

By H. R. Dumville, B.A.

With the increase in population and the consequent greater difficulty of achieving public distinction, there has arisen in our midst a body of people ever on the look-out for some subject, no matter how essentially trivial, upon which, by misrepresentation and false reasoning, to excite popular feeling, and thus earn a temporary name for themselves. Of this body, no inconsiderable section is formed of what may be termed the moral faddists. Amongst other achievements, they will be remembered as being the organizers some little time back of an agitation against the employment of women at the pit mouths in the north of England, mainly by reason of the intense degradation that it was said the workers were subjected to. The women themselves, in the absence of any private income that would render manual labour unnecessary, were quite satisfied with the work which these charitable busybodies were thus wishful to deprive them of.

It eventually resulted in a species of agonized appeal arising from the workers, which, briefly summarized, may be indicated as, "For God's sake, leave us alone! What may seem very horrible to you in your position of life, we're accustomed to and think nothing of. You will deprive us of our work by your foolish sentimental clamourings, and give us no other employment in return, and then we shall be left to poverty and starvation. For God's sake, leave us alone!" And a deputation of female workers actually went up to London in the extremity of their distress to petition Parliament to protect them from their kind, good-natured friends! Since then the moral faddists have been comparatively quiet, until the commencement of this year, when, again seized with the old fever of wholesale purification, and headed by that peculiar organization known as the National Vigilance Association, they entered upon a vigorous crusade against the employment of children on the stage.

Now, far be it from us to deny the good intention or well meaning of many of these social reformers. There are, as we have indicated, many who take up the movements with which they are identified from interested motives. Some, no doubt, are wholly influenced by the desire for public notoriety, and the self-advancement that such notoriety may possibly bring. Others, again, are by nature fussy, and are gratified by a sense of their own importance in forwarding what they consider a good work. But there are, again, others, and a large number, who unselfishly take a deep interest in these questions of social welfare, and are actuated by motives of the purest and most ennobling kind. But in this case we humbly submit that their zeal has deplorably outrun their discretion. It may, indeed, be said about them, as of so many philanthropic bodies, that in the enthusiasm of their lofty ideals and praiseworthy intentions they have lost sight of the hard realities of every-day life. Urged on in their actions by the generous impulses of a warm and sympathetic nature, they have scarcely allowed the weightier claims of reason to be heard. Proof of this is well shown in the way they have debated this question. Throughout the discussion they have invariably argued as if the matter lay between the hot theatre on the one

hand and a comfortable home, such as they themselves are accustomed to, on the other. The falsity of such reasoning is very apparent.

No doubt some of the little performers are children of respectable lower and middle class parents, actors at the theatre, dressers, and the like, but in the majority of cases their parentage is much lower, and to convey them from the squalid, degrading surroundings of "home" to the happy, inspiriting life of the theatre, open to objections in some respects though this may be, is to confer upon them real benefit. Nor can any comparison generally be drawn between their lives and the lives of the better classes.

Naturally it may be expected in these columns that we shall treat the subject from a health point of view; and this is what we are about to do. These children, we contend, are physically and intellectually better for their connection with the theatre. Firstly, because of the mental stimulus that the exercise of their employment entails; and, secondly, on account of the training and discipline they are subjected to, who have little rational restraint placed upon their movements at home. Their ordinary or every-day amusements, it must be remembered, are few. For the most part, they play about in the streets, with an occasional visit perhaps, in groups of five or six and generally accompanied by a broken-down perambulator, to one of the parks. Street games in poor, over-crowded thoroughfares are not numerous. They may be said generally to consist in going round a corner and allowing another child to come and look for you—a species of "I spy!" played with various innovations.

For the still younger generation there is certainly the entrancing occupation of making mud pies—an enjoyment for which the surroundings offer every convenience. Barring these two exhilarating sports, there is practically nothing for the juvenile population to do by way of recreation but lounge about and occasionally take a hand with the baby. At night matters are even still worse, and the little ones are exposed to the evil influences with which the streets of the poorest localities so plentifully abound. Think, then, what it must mean to such a child, what a wholesome stimulus it must afford to the mind, and through this to the general health, to be transported from these dismal surroundings, where everything is calculated to stunt the moral and physical growth, to the delightful, invigorating region of the play-acting world. That the children enjoy their mimic calling is amply attested by their happy, smiling faces; and it has truly been said that the greatest punishment that can be inflicted upon them is to be told that they shall not "go on" in the evening. As for the training and discipline incidental to their work, this may surely pass without question, for certainly no one, even with the most primitive knowledge of the stage, can suppose that the children are allowed to run riot there, or that strict supervision and painstaking rehearsal are not necessary to their performance.

"A Curate," writing from Holborn to the London *Standard*, has so excellently touched upon the phases of the subject to which we have alluded that we make no apologies for quoting from his letter. His testimony is all the more valuable because he has practical acquaintance in the course of his work with the poor who live in and near the neighbourhood of Drury-lane, Wych-street, and Covent-garden—localities from which these stage-children are largely recruited. "My experience," he writes, "tells me that the children of the poor seldom at any time go to bed much before midnight; they hang about or play round their courts or the doors of the public-houses, finding a sad kind of excitement in watching the eccentricities of drunken men and women, and in listening to and then copying the coarse jokes and filthy language of their elders. I ask, therefore, which is better — the theatre, with its bright surroundings, its enthusiastic audience, its careful supervision and training, and weekly wages; or the dark and dirty court, with its sad and gloomy surroundings, or the bright public-house, with the thousands of temptations placed in the very sight and hearing of the children? . . . . Mrs. Ormiston Chant* will pardon me if I say that she is mistaken when she asserts that the acting has a bad effect on the children's health. Those that I know—and they are not a few—are remarkable for bright and healthy faces and cheerful spirits, presenting a marked contrast to their less fortunate sisters. Neither would they be in bed if they were not at a theatre; the mothers, as a rule, use no compulsion in sending their children to bed, and the children naturally stay up as long as they possibly can. . . . . Surely, sir, the public will admit that we clergy have at least the spiritual welfare of those of Christ's little ones which are committed to our charge; and if we honestly thought that their employment at the theatres was in any way calculated to produce harm, we should be amongst the first to enter our protest; but we try, to the best of our ability, to instil some little brightness and happiness into their dark lives. They cannot get this in their homes and surroundings, and we welcome the theatre as an innocent and substantial enjoyment for them."

To this may be added the pregnant words of the *Standard*, in a leading article on the subject. "If the pantomime children run some risk of receiving unwholesome impressions from their vocation, it ought to be remembered that they cannot help receiving some others which are beyond all question beneficial. The discipline of the drill-master and the ballet-mistress is in itself a valuable training to the untaught, unbroken waifs and strays of our streets. They learn to obey orders, to understand the proper use of hand, foot, and eye; to be prompt, ready, and docile. Surely these are not useless acquirements, especially when they are bestowed upon children who are sometimes little better than barbarians. It would not be too much, indeed, to claim for the pantomime that it is often the one spot of brightness in the dingy and melancholy lives of these poor little creatures. It needs very strong arguments on the other side—much stronger than any yet advanced—before we can consent to abandon the system which removes some thousands of children every year, during the long, dark evenings of winter, from the dreary pavements or the miserable dens they call home to a place which, to them at least, represents life, brightness, well-directed, well-disciplined activity, and no small share of solid comfort as well."

We have looked with some interest to see what substitute these philanthropic agitators, who are chiefly urged on in their crusade by considerations of morality rather than the physical well-being of their *protégés*, propose to give for the cheering and recreative influence thus taken away. And so far as we can make out, it is summed up in that ominous word for juvenile hearers—school. In the name of these same juvenile members we submit that the exchange is a bad one. No one can say that we have not on all reasonable occasions strenuously supported the cause of education in these columns. But there is a limit to all things. Pale faces and weakly limbs

* One of a deputation that recently waited on the Home Secretary in opposition to the employment of children on the stage.

are not to be cured by a dose of elementary mathematics, nor is the most efficacious treatment for drooping spirits a course of vexatious spelling. Education in its truest sense means something more than the mere technical training of the mind, excellent in its proper place though this may be, and recreation is equally as necessary to a child's well-being as a knowledge of reading, writing, and arithmetic. Had we our way, the wretched houses of these poorer people should at once be demolished, and in their stead clean, airy dwellings, where the laws of domestic and sanitary health were well-known and enforced, should be substituted. In that case there might be some argument in favour of the retention of these children at home, where they would be surrounded by the beneficial influences of the domestic circle; at present, we believe the mass of evidence to be all on the other side.

But, alas! Rome was not built in a day, and though of late years great progress has been made in opening out and cleansing the more crowded localities, much still remains to be done. In the meanwhile, by the action of the moral faddists, a means of beneficial recreation is likely to be taken from the young children who live in these dark and dreary regions. What, beyond the doubtful benefit of greater education, may we ask, are these philanthropic agitators prepared to do for them in return? We have known instances ere now where, the struggle being over and public excitement having subsided, all interest has ceased in the class about whom the contest has raged, and they have calmly been left to a worse fate than that from which they were rescued. We sincerely hope this will not be the case with the poor little stage children.

Survivors of a Past Age. — An interesting letter from Sir Duncan Campbell to the *Daily Telegraph* draws attention to our aged men, and the history of the times to which their active life belongs. Many cases of longevity are quoted by him, and an interesting record, showing that further development of hygienic science and careful living may be expected to do much to prolong the average of human life, and save valuable experience and wisdom for the benefit of humanity. The correspondent whose letter we quote from is personally acquainted with an old man named Hudson, aged ninety-six, who has lived all his life at Merton, in Surrey, as a gardener, and is one of the latest survivors of those who knew Lord Nelson, and attended his final departure in 1805, just a month before his death at Trafalgar. Commander E. B. Emery, who three times circumnavigated the globe, is now in his ninety-fifth year. Commander James Liddell, J.P., is now nearly ninety-one. Among members of our own profession, the eminent naturalist and Arctic explorer, Deputy Inspector-General of Hospitals and Fleets, Robert McCormick, R.N., F.R.C.S., was born in 1800. Other well-known examples of longevity might be mentioned, but it will suffice to mention as additional examples of survival beyond the average period of mental activity the names of Mr. Gladstone and Mr. Edwin Chadwick, C.B., one of the pioneers of sanitary reform in this country.

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Personal Health

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With health all taste of pleasure flies."—*Gay.*

HOW TO PRESERVE THE SKIN AND HAIR.

A WASTE PRODUCT MADE USEFUL.

Some calculations have been made of the vast amount of wool-fat or oil which is annually washed away in streams during the time of sheep shearing. The figures, of course, run into millions upon millions of pounds in weight. It is only in recent years that any attempt has been made to practically utilize this, and thus prevent a prodigal extravagance. Professor Liebreich, of the University of Berlin, being of a practical as well as scientific turn of mind, believed that this fat from the sheep's wool could be turned to a good purpose. He observed that, contrary to ordinary fats and oils, it was miscible with water, and took advantage of this peculiarity in his experiments to obtain it in a pure state.

Professor Liebreich reasoned that a fat obtained from wool would be more readily absorbed by the skin and hair than that obtained from other sources. This argument he afterwards found to be true in fact, and that the wool-fat was readily absorbed by the skin and hair. Scientific experiments satisfied him that when properly purified it was free from irritating qualities, even when applied to the most delicate skin.

The Professor also ascertained that wool-fat differed in composition from other fats in the absence of glycerine and in the presence of cholesterine; and, moreover, discovered that the specially purified wool-fat known as Lanoline was not capable of becoming rancid. Dr. Gottstein, a disciple of the famous Dr. Koch, the bacteriologist, has recently stated that no germs of disease can grow in it. These peculiarities, coupled with its additional advantage of absorbability, were found to constitute Lanoline, the best possible basis for ointments. Medicated applications to the skin, as ordinarily prepared from lard and other glycerine fats and oils, always become rancid in a short time, and sometimes cause skin diseases worse than those they are intended to cure.

The penetrating properties of Lanoline are such that ointments prepared with it should not be made so strong medicinally, as if the usual lard basis were employed. Mercurial ointment, for instance, is only made one-half or one-third the ordinary strength. Lanoline is particularly desirable for the inunction of medicaments which are soluble in water, as iodide of potassium, solid extracts, alkaloids, &c.; also in ointments and plaisters of lead and mercury, oxide of zinc, iodoform, arsenic, carbolic acid, salicylic acid, ichthyol, &c.

Lanoline is prepared by frequently washing and churning the wool-fat with water and other cleansing agents, the separation of impurities being effected by centrifugal power. It is supplied in the anhydrous form, and also as ordinary Lanoline, which contains about twenty-five per cent. of water. The Anhydrous Lanoline will readily absorb twice its weight of any aqueous fluid by trituration, or by being rubbed on a slab with a spatula.

It is recorded in history that the ancients employed wool-fat as cosmetic, under the name of Œsypus, which they highly esteemed as a nutritive emollient to the hair and skin. No doubt it would have been much more highly prized if it could have been obtained in the fragrant white and agreeable form in which it is presented in the toilet preparations now manufactured by the aid of scientific skill. Eminent dermatologists agree

in considering that the nutrition and health of the hair and skin depend upon the natural secretion of fat, and if this be deficient the hair becomes weak and dry, dandruff accumulates, baldness ensues, whilst the skin becomes rough, wrinkled, and liable to chapping, especially upon the slightest approach of cold weather.

The applications of Lanoline to the skin with a little friction is followed by its complete absorption, and its effect is to keep the skin soft and elastic and to preserve the natural brilliancy of the complexion. For this purpose the Lanoline Cold Cream or toilet Lanoline, an admirable remedy in cases of burns, cuts, abrasions, &c., as supplied by chemists, is preferable. When applied to the hair and scalp in the form of pomade the first effort is to prevent dandruff by the antiseptic action of the Lanoline, and the second to nourish the scalp and hair, so that they regain their former healthiness and the hair its natural gloss.

Lanoline appears to be the latest innovation in the manufacture of soap, and is peculiarly adapted to the preparations of toilet soap.

When washing with Lanoline soap the natural fat of the skin is dissolved and carried away by the alkali; but the Lanoline is emulsified in the water, and, having a strong affinity for the skin, is absorbed by it directly, thus supplying the loss of the natural fat upon which the skin depends for its healthful condition. This explains why those whose skin becomes rough and tender by using ordinary soaps find Lanoline soap to be the only kind that they can use with satisfaction. The face and hands should be washed with Lanoline soap before applying the Cold Cream or toilet Lanoline at night for chapping, roughness, redness, and unhealthy conditions generally.

As a medicinal soap Lanoline is, probably, unequalled, owing to its soothing and healing properties. Antiseptics may be mixed with it, as in Eucalyptia and Pinol soap, rendering it both fragrant, disinfecting, and stimulating. The Ichthyol-Lanoline soap is used with great success in eczema and other skin affections and rheumatism. A new era in the manufacture of toilet soaps and cosmetics appears to have been developed by the introduction of Lanoline.

ON GETTING OLD.

There is a very large meed of sympathy to be reserved for folk who are getting on in years, and who are approaching the "sere and yellow" stage of existence. I fancy, however, the liveliest commiseration must be reserved, not for those who have long passed the meridian of life, but for the units who have just begun to feel they are getting old. A man who hitherto has been able to move about and around without an ache or a pain, and who has not needed to bethink himself very much of what he eats or how he eats it, begins to be conscious that he cannot take the same liberty with himself as of yore. He finds that he becomes more readily tired than formerly; that his walking or cycling demands greater care than it once did, if he is to experience no sense of lassitude thereafter; and that work and play alike cannot be performed or indulged in with the same healthy recklessness as of yore. He takes alarm, and consults his medical man, but is told there is nothing wrong. Then, one morning, he awakes to the consciousness of the truth. It is not that disease has seized upon him or debility attacked him. His life is healthy enough; but he is, in a word, "getting old." It requires some exercise of philosophy, I admit, to face this fact, especially if one, prior to the discovery in question, has lived a healthy and robust life. One dreads so much to begin the descent of life's hill! Climbing up is exhilarating, because, as the toil increases, the strength grows from more to more. But going down is a very different matter, and we would fain put on the brake if we could, and arrest the course of existence as it speeds onwards to old age.

Folks who are getting old come to have a much livelier sympathy with Dr. Faust than they entertained at an earlier period of their existence. Rejuvenation is regarded as a splendid idea, and the elixir of life seems to present a very reasonable case both in the way of demand and utility. We may depend upon it that, unless human nature very long ago had found the idea of escape from the penalties of old age a highly pleasant one, the Dr. Dulcamaras and other mystics would not have driven a flourishing trade in their pills and potions. But modern life has its elixirs, pastes, pills, polishes, and lotions, to say nothing of false teeth (which are necessary enough, it must be admitted, as aids to digestion), false curls, wigs (advertised as warranted to show parting of the most natural kind), and even eyebrows. I never glance over the pages of a certain fashionable ladies' newspaper without smiling and sighing over the means which are warranted (and "sent by post, free from observation, securely packed") to make Marguerite present the appearance of refreshing juvenility. But, alas! it is appearance only, after all. There is no rejuvenescence possible for us except in the way of the adornment of the outer man and the external woman. Madame Rachel's arts and devices are still extant, but they do not soar to the heights of Dr. Faust's ambition. For the pastes and powders, and the hair-dyes and wigs, one can but preserve a measure of just scorn. They represent only the feeble attempts of folly to whiten the sepulchre. The old alchemists, on the other hand, one can honour and esteem amid all their crazes. Their studies over their alembics at least attempted in all honesty of purpose the vain task of abolishing age, and of giving back in earnestness to the quivering limbs and aching bones the fire of early life and the elasticity of youth.

I confess these thoughts have been suggested to me by an announcement which recently appeared in the newspapers that Dr. Brown-Séquard, of Paris, a well-known physiologist, had been lecturing in that city on a newly discovered method of renewing our youth. His discourse, says the journals, startled his auditory. One writer adds that it is certain more will be heard of Dr. Brown-Séquard's discovery; but this writer must be a very ingenuous newspaper man. I expect more will be heard of it, and that not much to its credit as a matter of rigid science. A medical newspaper throws some light on the doings of the Parisian expert. Dr. Brown-Séquard, I learn, makes infusions, decoctions, or tinctures, call them what we will, of various parts and tissues of lower animals. These decoctions he is prepared to inject into the human system, probably by aid of a nice little syringe, such as is used to insert morphia or other drugs into the skin. He declares that he has tried the infusions on himself, and, so far, exhibits the true courage of the *savant*. The result, thus far, has been satisfactory—so Dr. Brown-Séquard states, at least. He has experienced symptoms of lightness and increase of vigour. But, after all, may one not say as much for the beneficial effects of a suitable tonic? I wait for further information about these wonderful Parisian extracts for rejuvenating the human frame; but of one thing I am tolerably well assured, namely, that unless Dr. Brown-Séquard can completely alter the human constitution, he need not hope at his best to do

more than prolong life to a few years beyond its usual span. This result health-science will itself accomplish; but nothing can alter the stern decree of Nature, that our bodies are not meant to act as perennial and everlasting machines. Getting old and wearing out are just as natural facts of life as is being born or growing to adult life. The vital machinery gets feeble, and refuses to respond to the calls which it fully answered when we were young.

Nor is this all. The oncoming of old age is marked in every feature, organ, and tissue of the body. It is not merely that the hair grows grey and the face wrinkles, but that heart, and lungs, and brain all show the wearing-out process by unmistakable signs. If never ending or renewable youth were meant to be a possession of our lives, we should not find the internal signs of getting old stamped as natural symptoms of bodily decay so indelibly upon every tissue. What, for example, does Dr. Brown-Séquard say to the fact that after the age of forty our brain begins slowly and steadily to decrease in size and to lose its substance at the rate of about one ounce in ten years? Does he expect his infusions to replace the lost cerebral matter? I wot not. And there are other considerations which teach us that growing old is not a thing of chance or fate, but a rigid law of existence itself. For the bones lose their animal matter and become more and more brittle as age advances; the blood-vessels undergo a process of limy degeneration; the heart-fibres become fatty, and the eye undergoes similar changes. The senses become less and less acute, and the muscles respond less readily to their wonted stimulation. It would be strange indeed if, in the nature of vital things, we found our frames otherwise ordered. Even an ordinary machine of man's own making—watch or locomotive alike—wears and tears as the result of its work. Therefore, "getting old" is only a sign of work well done, after all. In truth, there is ample evidence to teach us that he is no philosopher at all who grumbles at age as a fact of life. We may not suppress a sigh and grieve somewhat that the beauty of the early morning has gone, and left the world clad in tints of more sombre hue than met our eyes in the early hours. But the evening has its own delights and its own harmonies; and the wise man sets himself wisely and without undue regrets to enjoy the twilight of life, and to make the most of what remains to him of life's little day.—*Dr. Andrew Wilson, in the "Illustrated London News."*

SWEET-SCENTED TOBACCO-PLANT.—The variety of tobacco, called *Nicotiana affinis*, is quite sweet scented, and has pure white flowers some three inches in diameter. Like all the kinds of common tobacco it has large, bold leaves, and makes an imposing foliage as well as flowers. It is a good plant to group, as the starer or conspicuous object in the mixed border, in the centre of a bed, or even as a bed by itself. The tobaccos are almost all natives of South America, and require to be raised first in a hot-bed and afterwards transplanted in the north. If this is not done, it takes some time before a showy plant is obtained, and thus part of the summer is gone. The plant is a continuous bloomer, so much so that it makes a good greenhouse plant, blooming all the winter. For this purpose the better way is to sow the seed in August or September, transplant first in small pot, and afterwards shift up until they occupy, say, a six-inch pot, which will answer to flower it in, except a very large plant is desired.—*Prairie Farmer.*

The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

DISINFECTION OF THE BODY IN SCARLET FEVER AS A PREVENTIVE MEASURE TO ITS SPREAD.

By L. MERVIN MAUS, M.D.

NOTWITHSTANDING the elaborate systems authorized and in force by National, State, and Municipal Boards of Health for the prevention of contagious diseases, it is only necessary to glance at the daily mortuary reports published throughout the country to note their general inefficiency. Though unsatisfactory in many particulars, public hygiene has done much to lessen at the present day the pestilential burdens with which humanity has been afflicted from the remotest antiquity. Small-pox, rightfully regarded at one time as the most fatal of the exanthemata, has sunk into comparative insignificance through the beneficence of vaccination. Typhus, ship, or jail fever has long since been relegated to the shades of the past through an intelligent appreciation of ventilation and necessary air-space; while its congener, typhoid fever, whose infective germ is most probably conveyed by a poisoned water-supply, may later on share a similar fate. Yellow and scarlet fevers, diphtheria, and measles continue, however, to defy the futile efforts of modern sanitation, and still present a bold front in the midst of our most advanced and enlightened civilization.

In view of the recent strides in the etiology of disease a more flattering prospect for the eventual subjugation of all infectious diseases by human intelligence lies before us. It has been satisfactorily established that scarlet fever does not originate *de novo* from certain atmospheric or telluric conditions, but is produced by a definite specific principle carried about from place to place. Many countries have been entirely free from it for centuries. It was not known in Europe until 1557, when it was introduced through the gates of Asia, nor did it make its appearance in America until 1735, when it was observed in New Hampshire. So slowly did the infection travel that it did not cross the Hudson River until eighty years later, nor appear as far south as North Carolina until 1830. Dr. Rush said, sixty years ago, that a physician would not likely see more than one case during a lifetime.

While the etiology of scarlet fever has not been thoroughly established by bacteriological investigation, yet there is a general professional concession that it originates from a specific germ, and that susceptibility to it is greatest during the period of desquamation, or when the detached cuticle is broken up and floats through the atmosphere laden down, as it were, with the infectious microbe. There is a unity also among the profession as to the method of its dissemination, all agreeing, as a rule, that the poison enters through the respiratory system, though, in a few instances, cases have been supposed to result from the ingestion of food, milk, or water containing the germ or infection; the latter may be probable, but is more than likely rare.

Scarlet fever may be communicated directly or indirectly; by personal contagion, or through the agency of infected clothing, books, letters, toys, hair, or other articles exposed to it. When it is communicated by personal contagion, the distance is usually limited to three feet or less. The non-susceptibility of many persons, when exposed to this disease, is most probably due

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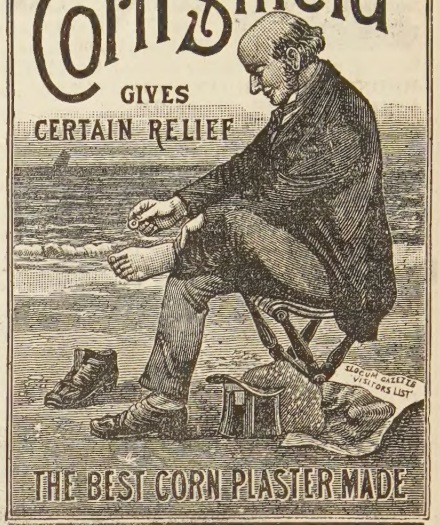

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The above is a Selection only. The Complete List of nearly FOUR HUNDRED NOVELS will be sent free upon application.

LONDON: CHATTO & WINDUS, PICCADILLY, W.

to an accidental escape from inhaling air containing the germs. Familiar as we have been for many years past with the propagation and spread of scarlet fever, it seems rather strange that no effective system has been devised heretofore for its prevention. So far, instead of endeavouring to destroy the infection by chemical or germicidal measures, we have been satisfied with the more cowardly course of locking up or quarantining it; and consequently the individual who recovered from the disease was commonly sentenced to a dreary confinement of from four to eight weeks.

It seems quite rational to presume that a scarlatinous patient is surrounded by an atmosphere contaminated with the infectious microbe, since we know that an approach within a few feet or less of the patient is necessary to contract the disease by personal contagion. If this be true, we certainly are warranted in supposing that constant inhalation of this poisoned air is liable to increase the severity of the attack, and to keep up, as it were, a constant auto-infection. In view of this fact, it seems to me that a system of daily bodily disinfection would not only destroy the germs so as to prevent the spread of the disease to others, but would be a useful adjuvant to the treatment, inasmuch as through these applications the skin could be kept free from the poison, as well as the atmosphere the patient is compelled to breathe. This practice does away, in my opinion, with the necessity of prolonged isolation commonly enforced. So well am I satisfied with thorough and complete disinfection in scarlet fever, that I believe we can ignore isolation altogether in the mild cases, and ordinarily permit patients to join the family circle in ten days to two weeks—as a matter of course the severity of the attack and the condition of the invalid being considered.

In presenting the following brief rules as preventive measures to the spread of this disease, I can say that this practice has been founded on personal experience, so far entirely satisfactory; I believe also that this treatment would be successful in the other exanthemata as a preventive measure.

1. Sponge the patient thoroughly morning and evening with a tepid solution of corrosive sublimate, 4 to 1,000, as soon as the eruption makes its appearance.

2. Wash the hair once daily with a solution of the corrosive sublimate, of the same strength, and also a solution of borax 1 to 250.

3. Disinfect the urine, fæces, and expectoration, also the discharge from the ears and nose if there be any. A solution of the bichloride, 1 to 1,000, is best for this purpose.

4. As soon as the patient is permitted to leave the bed have the body washed with warm water and soap, then sponged with the 1 to 4,000 bichloride solution, wiped dry, and anointed with the following ointment: ℞. Sodii biboratis, zinci oxidi, of each four drachms; ol. gaultheriæ, half a drachm; vaseline, four ounces.

The hair should be thoroughly washed with the bichloride and borax solution.

5. The patient is then to be enveloped in fresh and clean clothes throughout, and allowed to leave the sick-room if his condition otherwise admits of it.

6. The bed-linen, soiled clothes, towels, &c., should be placed in a suitable sublimate solution and boiled, and the room well disinfected with sulphur. The sulphur candles are very convenient, and the disinfection should be repeated the second day, as the germs are very tenacious of life.

7. Require the nurse or attendant to keep the hair, face, and hands well disinfected during attendance, and to likewise make a complete change in his or her garments on date of the disinfection of the sick-room.

8. Continue the provisions of the third and fourth rules once daily until desquamation is complete.

The above method for the prevention of scarlet fever has proved very efficacious in my hands, and, though simple, warrants a fair trial by the profession. I think there need be no fear of corrosive sublimate poisoning, as a very minute quantity of the drug is liable to enter the system by this means. Other germicides may be used in place of the mercury, and it is probable that other eruptive diseases may likewise be treated with success in a similar manner.—*Medical Record.*

At a recent meeting of the Scientific Society of Copenhagen, Professor Steenstrup gave an account of the results of his examination last year of the great mammoth deposit at Predmost, in Moravia. Dr. Wankel and Professor Maschka, who have devoted much attention to the subject, are of opinion that the mammoths whose remains are found in this district were killed by man, and that their bodies were dragged thither to be eaten. Professor Steenstrup, on the contrary, holds that the mammoths themselves sought the locality, and that they must have died from want of water, or from some other cause with which man had nothing to do. The splits in the remains are due, he thinks, to the action of water and sand, and afford no support to the notion that the knuckles were cleft for the sake of the marrow. It is certain that some of the bones have been exposed to the action of fire; but Professor Steenstrup maintains that the traces of fire may be due to the fact that fires were at one time lighted upon them. On some of them decorative lines have been scratched, but these may have been made long after the mammoth was extinct in Moravia. The lines, according to Professor Steenstrup, are identical with the ornamentation of pottery of the neolithic age.

The Prevention of Tubercle.—The Streets Committee of the Darlington Corporation have resolved to recommend to the Council a periodical inspection of all dairymen's cows within their jurisdiction, with a view to prevent or minimize the spread of tubercular consumption by means of milk from animals suffering from tuberculosis. This decision must be regarded as the outcome of a recognition, which is daily on the increase, of the risk that attaches to the use of milk from cows suffering from tuberculosis, and of the fact that a very large number of cows are affected by this disease. As such we are glad to record the decision come to, for we cannot lay too much stress on the need which exists for maintaining all our food-supplies under an efficient and systematic supervision. But whilst the danger attaching to milk supplies needs vigilance on the part of sanitary authorities, we trust that, in this matter of phthisis, they will not forget that many other preventible causes are likewise in operation; and that where, as in matters of overcrowding, dampness of houses, and such like, they can effectually intervene, they should be as prompt as in dealing with the milk-sheds. The building of houses on damp soils without a superficial layer of concrete, failure to put proper damp-courses into walls, and the overcrowding and ill-ventilation of factories, workshops, and dwellings—these are all factors in the production of the disease. Attention should also be given to the value as a preventive which is supplied by regular boiling or cooking of all milk used as food.

FREQUENCY OF SKIN DISEASES.

Not everyone has the privilege to consult an eminent dermatologist when affected with diseases of the skin. Statistics may, therefore, be brought to the patient's aid, and we believe the following will be instructive as well as interesting. Of all forms of skin diseases, eczema constitutes one-half of the cases; so that, generally speaking, the probabilities are, in any given case of skin-trouble, in favour of its being this. A disease of the outside of the limbs without itching and with silvery scales is apt to be psoriasis. Psoriasis differs from eczema in that it is dry and does not itch, while the latter is dry and "weeps" and itches intolerably. For this itching, as well as for the disease itself, nothing can compare with Vinolia; while for psoriasis, seven grains of chrysophanic acid should be added to each ounce of it.

If this does not cure, increase the seven to fifteen grains. Black spots and red pimples on the face and shoulders are apt to be acne or comedones; red pimples with itching between the root of the fingers are usually the itch, which may likewise be on the body; a wheel of pimples about as big as a crown is, in all probability, ringworm; simple pimples on the body are oftener than not, fleabites:—

Table Showing Ratio of Skin Diseases in 5,000 Cases.

Eczema	2242	Impetigo	19
Acne (blackheads and pimples)	348	Keloia (hypertrophica scars, stains)	14
Syphiloderma	327	Lentigo (freckles)	1
Ulcer	309	Leprosy	1
Tinea (ringworm)	180	Leucoderma (deficient pigment)	1
Lice on Head and Body	163	Lupus	11
Psoriasis	152	Lupus-erythematodes	6
Scabies (itch)	139	Maculæ-atrophicæ	1
Urticaria (nettle-rash)	132	Milium (white pimples)	3
Unknown	122	Molluscum	11
Abscesses	6	Morbilli (measles)	1
Ambustio (burns, scalds)	7	Nails, diseases of	5
Alopecia-areata	7	Nævus (mothers' mark)	18
Alopecia (baldness)	13	Phemphigus	15
Bromidrosis (fœtid sweats)	1	Perino (chilblains, frost-bite)	7
Chloasma (discolouration)	17	Pruritus (itching)	50
Comedo (blackheads, grubs)	3	Purpura (purple skin)	19
Condyloma	2	Rhus-poisoning (ivy)	20
Cornu-cutaneum	1	Scarlatina	1
Dermatitis	34	Scleroderma (hard skin)	4
Epithelioma	25	Scrofuloderma	27
Erysipelas	52	Sebaceous-cyst	2
Erythema	81	Seborrhœa	55
Elephantiasis-arabum	5	Tinea-favosa (favus)	17
Furunculosis (boils)	65	Tinea-versicolar	81
Herpes	28	Tyloma (callosities)	2
Herpes-zoster (shingles)	73	Varicella (chicken-pox)	22
Hirsuties (hair-growths)	1	Verruca (warts)	14
Hyperidrosis (excess sweat)	7	Xeroderma (yellow skin)	2
Ichthyosis (fish-skin)	5		

Never use a zinc or galvanized-iron lemon-squeezer. The acid of the lemon dissolves the metal, and produces a poisonous compound.

Consumption, according to Dr. Irving A. Watson, prevails in all parts of New Hampshire, but is apparently influenced by topographical conditions. It is more prevalent at a low elevation with a maximum soil moisture than in the higher elevations with a less moist soil. The season has only a small influence upon the mortality from the disease; the mortality is considerably greater among women, and no age is exempt from it; but the least liability to contract it exists between the ages of two and fifteen, and the greatest between twenty and thirty. The death-rate is relatively much the larger among the foreign-born.

Our Medicine Chest.

"The aim of using drugs is not so much to destroy diseases as to aid and assist the natural powers to overcome the disease-principle."—*Holland.*

A London physician, we observe, gives a favourable report on sulphonal. It is superior, he says, to paraldehyde and urethane in most cases, and better than chloral and combinations of chloral and the bromides. He has repeated it night after night for weeks, in a case of intractable head neuralgia, without any injurious consequences. Cases now and then do occur in which it fails—perhaps because the primary dose was not sufficient. The cases, however, of all others in which sulphonal is a boon are those of sleeplessness arising from nerve strain, worry, nervous headache, wakefulness or watchfulness. He generally commences with a dose of twenty or twenty-five grains, to be given when the patient is settled for sleep, say at 10 p.m., and if that does not cause sleep before 12·30 to 1 a.m., he repeats the dose. Frequently the second draught has to be taken in order to secure sleep. He has nothing new to say regarding the pharmacy of its administration.

For sweating of the feet the following is recommended: Salicylic acid, three parts; starch, ten parts; talc, eighty-seven parts. Mix. Apply to the feet. This formula is used in the Prussian army.

For the cure of dyspepsia, accompanied with palpitation and flatulence this remedy has a high reputation: Com. tinct. cardamomi, two drachms; arom. spirits ammoniæ, two drachms; sodæ bicarb., one drachm; inf. of gentian q. s., to six ounces. Mix, and label: "One teaspoonful when required."

Dr. Newton Pitt, of Guy's Hospital, read a paper recently on headaches, of which the following is the substance:—Hemicrania.—Origin in the cells of the cerebral cortex. Treated by taking thoughts from centre of headache. Cold baths to be administered summer and winter. For attacks: antipyrin, gr. x.; sp. ammon. arom., fifteen minims; or acid. hydrobromic. dil., fifteen minims, thrice daily. Frontal headache.—Origin: insufficient exercise, insufficient food, insufficient rest. Treatment: rest, medicines as above, followed up with tr. nucis vomic. and acid. nitro-mur. dil.; change of air. Constant headache.—Treatment: ext. cannabis indica, gr. quarter to half gr. in pill, thrice daily; tonics. Electric current to be used frequently.

Continental physicians appear to have discovered lately that cerium oxalate has proved a useful sedative in sickness, hysteria, and an astringent in gastro-intestinal catarrh. It exerts a peculiarly sedative action on the sympathetic nerves. No ill effects were observed from its use, even when doses as large as twenty grains were repeated several times a day. Dr. Gardner, of New York, has pronounced it the best specific against sea-sickness that has so far been made known.

For erysipelas Dr. James Franklin recommends the use of quiniæ sulph., one drachm; tinct. ferri mur., half a fluid ounce; tinct. cinchona, one and a half ounces.

Mix, and apply locally all over and just beyond the inflamed area, with a soft camel's hair pencil or feather, two or three times in twenty-four hours.

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Dr. Samuel Benton speaks highly of the use of Oidtmann's purgative as a remedy for habitual constipation, and states that the preparation contains: Glycerine, one drachm; succi limonis, half a drachm; succi rhamni frangulæ, half a drachm, with a diminutive quantity of alcohol and acetic acid (one in eight hundred). He has given the medicine an extensive trial, and has found it by micro-injection a most gentle and unirritating means of emptying the rectum.

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To cut short the development of an abscess it is recommended that the following be used: Ext. aconiti, fl., ext. belladonnæ, fl., ext. opii, fl.,—equal parts. Apply with brush as needed to ease pain; also give fluid extract of phytolacca internally.

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In chronic rheumatism the following may be tried: Potassii iodid, four drachms; tinct. cimicifugæ, one and a half drachms; vin. colch. sem., two drachms; aquæ, q. s. ad., four ounces. One teaspoonful in water or milk three times a day.

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A lotion for sun-burn is made as follows: Citric acid, two drachms; pure sulphate of iron, eighteen grains; camphor, two grains; elder-flower water, three ounces.

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Some authors infer from their experiments that the liquid acid of castor oil is not a single compound, as it has been hitherto supposed, but a mixture of two isomeric acids. The proportion of these acids is about one of the former to two of the latter. As no dioxystearic acid has been obtained from the oxidation of the liquid acids of castor oil, it may be concluded that of all the fatty oils hitherto examined, castor oil is the only one which contains no oleine.

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In India white ants are exterminated by the use of the following compound, which may also be used for common ants. The juice of *aloe vulgaris* is boiled to a thin syrup (one pound of Cape aloes in a gallon of water will give a similar liquor), and six ounces of powdered camphor added to every gallon of juice; then, having excavated the white-ant hill to a depth of about a foot or two, a quart of the stuff is poured in, taking care to cover as much space as possible; then fill in the excavation, and leave the ants to their fate. The preparation is extensively used in America for destroying various insects, and it is said that coffee-borers and other vermin of that species which attack plants succumb to it marvellously. In these cases it is mixed largely with water, and sprinkled on the leaves of the tree so attacked through a garden pump or watering-can.

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Saccharin is regarded by a French writer as a valuable antiseptic. A strength of 1 to 500, as an addition to mucilaginous and other solutions, prevents the formation of low organisms. Thus a valuable, inexpensive dentifrice may be prepared by simply dissolving saccharin in water, to the proportion of 6 per cent. A teaspoonful of this in a half pint of water forms an admirable antiseptic mouth wash. In cases of malignant or other disease of the stomach, requiring the washing out of that organ, a solution of saccharin of the strength of 2 per cent. will be found very suitable.

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No ailment is worse to bear than pruritus or itching. Dr. Porritt, of Huddersfield says, in a medical journal, that it not infrequently taxes all a practitioner's resources for its relief. "In three cases lately under my care," he continues, "I have used, with good results, a cone composed of cacao butter impregnated with 2 per cent. of cocaine. This is rubbed over the part affected. The warmth of the skin melts off a layer of the cacao butter, which forms a soothing emollient shield over the irritable patch. The remedy has been put up in the form of cones, enclosed in boxwood cases with screw-tops, something after the manner of menthol cones. These can be carried about by the patient, ready at any moment for self-application. In irritable affections of the skin, in cases of insect bite, &c., the remedy is worthy of trial, and its use has distinct advantages over the more usual applications. Although containing cocaine, I regard the manner in which the cacao butter is spread out over the affected part as having a share in the curative process. It is a method of topical application capable of further development." Dr. Porritt adds that Messrs. Reynolds & Branson, of Leeds, have efficiently carried out his wishes, and have prepared the remedy in a very convenient and portable, as well as a cheap and elegant, form.

The high temperature produced during the slaking of lime has been but rarely utilized except as an agent in matters of accident in setting fire to vessels and buildings. *Egineering* adds to these the ordinary method of the helpers to masons, who warm up the coffee for their dinner in cold weather by placing the pail of coffee on a lump of lime, sprinkling on a little water, and watching it carefully to see that it does not boil too hard. Many years ago, before the invention of the diving-bell, a large wager was made between two gentlemen in regard to the possibility of one cooking a pudding at the bottom of the Thames. The winner had his pudding placed in the middle of a large sack of lime, lowered to the bottom of the river, and in due time pulled up, with the result of finding that the conditions of the wager, in regard to the cooking of the pudding, had been fully carried out. But of late lime has been frequently used to remove the frost from the ground in winter, and also to melt out water-pipes; as it has been found that a heap of lime laid on the earth, wet slightly, and covered over with blankets and other non-conducting materials, will draw the frost out of the ground. This is the complement of the process of facilitating engineering work in quicksand by means of the freezing processes frequently used for such purposes.

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When Faith grew doting, and our reason cold,
'Twas she discovered that the world was young,
And taught a language to its lisping tongue."
—*Charles Mackay.*

DANGER LURKING IN DECOMPOSING ANIMAL OR VEGTEABLE FOOD.

By H. E. Stockbridge, Ph.D.

(Of the Government Agricultural College, Sapporo, Japan).

Muscarine as a product of putrefaction has already been alluded to by me in my last report for the chemical department of the Agricultural College, and in foreign scientific journals, where the case has attracted some attention as furnishing facts previously unknown. My connection with the occurrences reported originated through the death of four persons from the consuming of fish-containing-food in a slightly putrid condition; and my analysis of the food was undertaken at the solicitation of the police department of the Hokkaidō Chō.

Two adults and two children living in Chitose died suddenly with symptoms of narcotic poisoning. Post-mortem examination, however, failed to satisfactorily account for death; but the appearance of the organs, together with the ante-mortem symptoms, were considered by the officiating physicians to resemble poisoning from the poisonous mushroom (*Agaricus muscarine*).

Specimens of the food eaten by the deceased were therefore sent me for chemical examination. The articles received were two; namely, a variety of edible mushroom, and a native food called "*sushi*," consisting of a mixture of fish and rice with a little *saké*, which is allowed to ferment and become vinegar before the mixture is eaten. The fish was *gnoi*, one of the most common and wholesome of Japanese river-fish. In the former of the two substances subjected to examination no trace of alkaloid or other injurious substance could be detected. The "*sushi*," however, reached me in an advanced stage of putrefaction. (This food is usually eaten in a condition decidedly "strong.") I was therefore compelled to recognize the uselessness of attempting the elimination or recognition of alkaloids by the usual methods of procedure, and to admit the extreme probability of the presence of some ptomaïne as a product of decomposition. The methods pursued and the results obtained may possibly require a brief introduction, that the facts involved may be the better recognized. Only the briefest possible *résumé* of the facts necessary for a better consideration of the questions involved is here admissible. The relations between alkaloids and albuminoids are known to be most intimate. The latter, acted on by certain micro-organisms, undergo a decomposition known as putrefaction, and the life-function of certain of these organisms results in the conversion of albuminoids into alkaloids; this latter group of compounds consisting chiefly of poisonous substances, until recently supposed to be exclusively of vegetable origin. Though numerous instances of poisoning through the consumption of food undergoing the process of putrefaction are recorded, and as long ago as 1822 Garpart and Stick made known the existence of a specific poison in decomposed animal matter, it was not till 1877 that really definite knowledge was evolved from the facts accumulated. The Italian chemist Selmi then first isolated a basic compound, of alkaloid character and toxic properties, of unmistakable putrefactive origin, and named by the discoverer "*cadaves alkaloid*," or "ptomaïne."

In 1880 the Italian Minister of Justice appointed a commission of chemists and pharmacists to investigate the entire field thus opened, and formulate the facts gathered. The work thus begun has been continued by the investigators of different countries, until there are now known and isolated not less than twelve of these alkaloids of putrefaction, seven of which have been made known through the labours of Dr. Brieger, of Berlin, since 1883. It is chiefly to this investigator that we are indebted for the enunciation of reliable methods of elimination and recognition.

The method adopted by me in the investigation undertaken was in most respects identical with that recommended by Brieger, the modifications being only such as were suggested by the somewhat peculiar nature of the substance and the circumstances demanding the examination; the ptomaïnes thus far eliminated being for the most part insoluble in ether, while the latter removes large quantities of organic matter, the presence of which renders subsequent purification more difficult. I first subjected the mass to one hour's extraction with warm ether in an automatic extraction apparatus of my own device. The extract thus obtained was set aside for future examination; and the residue, slightly dried, and free from fats and other ether-extracted matter, was heated with water acidulated with hydrochloric acid for two hours, the temperature being kept below 100 degs. C. The solution thus obtained was evaporated to a thick syrup over the water-bath, an acid reaction being carefully maintained, and the residue extracted several times with absolute alcohol, until the addition of alcohol failed to precipitate more nitrogenous matter. The fluid solution was then evaporated to dryness, the residue taken up in 90 per cent. alcohol, filtered and precipitated with platinic chloride. The precipitate thus formed was then treated with an excess of water; the alkaloid-platinum double salt, if present, going into solution, from which the insoluble platinum compound was separated by filtration. The solution was next subjected to a stream of hydrogen sulphide till all platinum was precipitated, the solution being then neutralized by sodium carbonate, and evaporated to dryness. This residue was repeatedly washed with absolute alcohol, and the solution obtained evaporated to dryness over the water-bath, and then taken up in water. This solution should now contain the pure hydrochloride salt of any alkaloid extracted from the original substance by the acidulated water.

Allowed to slowly evaporate over sulphuric acid, fine laminar opaque crystals were formed, which were found to be soluble in alcohol and in water, but insoluble in ether. The aqueous solution gave with phospho-molybdic acid and with mercuric-potassium iodide amorphous precipitates. Mercuric chloride produced a white amorphous precipitate, crystallizing after some time. With gold chloride, a bronze-coloured non-crystalline precipitate was obtained.

Platinum bichloride yielded a fine slightly crystalline precipitate of great insolubility. Excess of bromine-water produced a reddish-brown precipitate, soon disappearing.

The identity of the compound with muscarine, the poisonous constituent of the "toadstool," seems to be thus established, and is further confirmed by the evidence of the post-mortem on the victims of the consumption of the food from which the alkaloid was isolated. The official report of the examining physicians mentioned muscarine symptoms. No mushrooms were, however, found in the stomachs, though, because of the symptoms,

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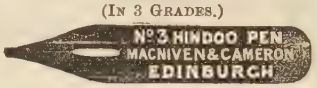

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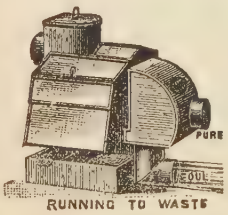

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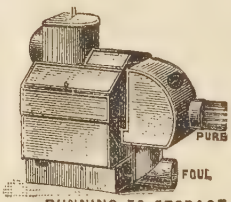

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some were furnished me for analysis. The further confirmation of elemental analysis has not yet been possible, since the total amount recovered was not more than sufficient for analysis; it was therefore deemed inexpedient to resort to the destruction of what might, under the circumstances, be required as evidence. A combustion analysis will, however, ultimately be made, and the results recorded. The ether extract made before the treatment with acidulated water was subsequently found to contain an alkaloid yielding white crystals over sulphuric acid, and a crystalline precipitate with gold chloride. I have as yet, however, been unable to establish the identity of this compound, and therefore reserve further details, together with results of efforts to "cultivate" these products of decomposition at will, for some subsequent report.

Muscarine, so far as I am able to ascertain, has not heretofore been recorded among the ptomaïnes isolated and named, although its existence as a product of putrefaction has been suspected; and Brieger speaks of the "*Muscarin äuliche Wirkung*" of an alkaloid isolated by him, but is not satisfied of its identity, as this alkaloid is not included in the list of those discovered and recorded by him.

The case I have here reported is, moreover, doubtless the only one yet investigated wherein muscarine, heretofore known only as a vegetable alkaloid, has been found as a decomposition product in a food the consumption of which has resulted in death, attended by the well-known symptoms of muscarine poisoning. The facts observed and here recorded seem to present one more illustration of the intimacy existing between the composition and decomposition of animal and vegetable organisms, and furnish an additional proof of the interest and importance of this new field of investigation. Interest in the researches made in this new domain must be proportional to their importance, capable as they are of developing facts of so universal significance, and dealing with transformations occurring not only in the food we may eat, but in any animal body as well, and demand new methods of lego-chemical investigation.

During the past year I have continued the investigation begun the previous season, and am now able to report the repeated isolation of muscarine as a product of the putrefaction of the food from the eating of which the four people of Chitose died, and, moreover, have been so fortunate as to discover two new and heretofore unknown ptomaïnes. One of these was obtained from the original ether extract; but, though their character has been carefully studied, I prefer to reserve opinion as to identification.

Discussion of the scientific interest and value of these facts is here out of place; but their practical value is, however, of widespread importance and applicability, both from sanitary and legal points of view. We are forced to recognize the danger of eating either animal or vegetable food after decomposition has begun, since this process may result in the development of deadly poisonous alkaloids resembling in physiological properties, strychnine, morphine, brucine, and other of the most powerful poisonous alkaloids hitherto known only as products of vegetable growth. Many diseases of a cholera-like character, perhaps even this most dreaded malady itself, may result from the consumption of food in which the process of putrefaction has begun. From a legal standpoint, chemists, physicians, and jurists are now compelled to recognize the possibility that many supposed cases of criminal poisoning are in reality the result of ptomaïne-formation, either in food or in the decomposing body after death.

Public Health

"Health is the first Wealth."—*Emerson.*

THE DOMESTIC WATER SUPPLY.

The matter of securing a pure and wholesome supply of water, is one that is constantly receiving more and more attention. In the larger cities, water-works are usually provided, which furnish an abundant supply, and, in the majority of cases, of excellent quality. In the country and smaller towns, each house-owner must look out for himself, and the question of the desirability of any given source of water becomes a very important one.

The most common sources of a supply of water are from rain-water cisterns, wells—both common and driven—springs, running streams, and ponds. In New England—thanks to the absence of a limestone formation—the ground-waters are comparatively soft, and, when not contaminated by drainage, are pure and wholesome. Rain-water falling on the roofs of buildings, and collected in cisterns, is largely used in all parts of the country, and is, of course, of great purity; but the liability of the cisterns, as well as the roofs from which it is collected, to become dirty, renders it more desirable to obtain the domestic supply from some natural source, where the water is constantly exposed to the purifying influences of light and air.

Undoubtedly the best and safest source of water is from deep springs, which are almost always free from organic impurities. In populous districts, springs which flow near the surface of the earth occasionally become contaminated. Several cases of typhoid fever occurred at Lausanne, Switzerland, from the use of water from an infected spring, but such instances are rare. In most cases, the streams of water which gush forth from the hillsides, may be used with assurance of perfect safety. A large proportion of the "mineral springs," which are so celebrated for their numerous cures, prove, upon analysis, to contain little or no mineral matter whatever, and their health-giving properties must be attributed to the free use of pure water alone, aided by the influence of the imagination. There are thousands of springs in New England, which only need a well-managed "boom" to confer the most remarkable therapeutic properties upon them.

Running streams come next in point of desirability; but it is evident that there is a much greater possibility of contamination. In thinly settled districts, a simple inspection will usually show any danger that may exist from such a cause, and there are many streams of pure water among the hills which, by a little simple engineering, could be made to flow directly into the kitchens of the farmhouses, and save the members of the family many tiresome journeys to the well or spring.

Lakes and ponds are very numerous in New England, and usually contain water of good quality. Many of the cities and larger towns derive their supply from such a source. The chief danger is, that, as the community grows, dwellings and manufactories will be erected within the watershed of these ponds, and drain their refuse matters into them. There is a most extraordinary indifference and recklessness manifested on this point, and it is almost impossible to prevent such contamination, even by legal processes. The city of Boston has had much trouble from this cause, although, as yet, the contamination is not great enough to be a very serious matter.

The common well is the most undesirable source of all. If it is deep enough to strike a living spring of water, and removed from all sources of contamination, it may be unobjectionable, but these conditions are rarely met with in the country, and, we may say, never in large towns or cities. A well is usually placed near the house for the same reason that the barn-yard, privy, and sink-drain are there, but their existence in the same vicinity is incompatible with a pure and wholesome water supply. Some even go so far as to dig the well in the cellar, and we recall the case of a refined and cultured family who actually had *both well and cesspool* underneath their dwelling, and only a short distance apart. Such a barbarous practice is unworthy of a civilized race, but it is to be feared that a large proportion of wells are not much better situated.

As to pipes for conveying water, no certain rule can be laid down. The majority of waters do not, apparently, act upon lead pipes, or else form an insoluble coating upon them, which prevents further action. In other cases, the action is continuous and rapid, and lead poisoning is likely to occur in those using the water. Pipes of compound metals—such as tin-lined lead, or galvanized (zinc-covered) iron—are even more dangerous, and should always be avoided. Iron is perfectly safe, and only has the disadvantage of sometimes introducing iron-rust into the water, to the injury of clothing that may be washed in it. This, however, is a minor disadvantage, and does not often occur.

Various patterns of filters are in use, very few of which are of any value whatever. They act only as a strainer to remove the coarser impurities, but have no effect upon the microscopic bacteria, or matters held in solution, which are the most dangerous. A flannel bag is exactly as good a filter as these expensive devices, and possesses the additional advantages of being easily cleaned or renewed. The most effective filters are those in which a disk of porous stone or earthenware forms the filtering material, but it is best to make sure of the original supply of water, rather than to attempt to purify it by any such uncertain methods.

To sum up, we may say that the best source of water-supply is from a deep and unfailing spring; next to this, running streams, large ponds, rain-water cisterns, and, last of all, deep wells, situated far away from any possible source of impurity. Driven wells are less liable to contamination than open ones, but the same objections apply to them in a lesser degree. Iron pipes are safe under all conditions, and filters are generally useless. It is often a matter of some trouble and expense to obtain a pure and abundant supply of water, but the benefits it brings will always more than repay the necessary outlay of time and money.

The Eyesight of American School Children.—Dr. J. L. Minor, of Memphis, Tenn., reports (*Memphis Journal of the Medical Sciences*) the results of his examination of 682 pupils in the public schools of Memphis. The refraction was normal in 523 out of 682; the refraction was hyperopic in 128 and myopic in 32. The myopia, therefore, amounts to less than five per cent., and the myopes were all in the fourth class, where they constituted fifteen per cent.

CHEMICAL ANALYSIS.—Dr. Drinkwater, Lecturer on Chemistry in the Edinburgh Medical School, undertakes the Analysis of Water, Foods, Wall-Papers, and of all other products and articles connected with Household Health and Commercial Interests. Terms on application to Dr. Drinkwater, Chemical Laboratory, 41, Chambers-street, Edinburgh.

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

A Word as to Wine.—Now wine may be defined as the fermented juice of the grape, containing no added matter, with the exception of alcohol, and the alcohol must not raise the strength of the wine beyond 13 per cent. by weight, or 28·1 per cent. of proof spirit. The addition of spirit to the extent given above may be purely for the preservation of the wine; any excess of that quantity is a noxious adulteration. Dr. Thudichum tells us that "much turbid and putrid, evil-smelling wine is treated at Jerez with animal charcoal. Putrid and evil smells can be removed by charcoal, but the clearing such wines is only a temporary success. Much wine is fined with blood, which is put warm into the bota. The albumen precipitated by the alcohol causes the turbidity to be enveloped, and drags it to the ground. Jullien's powder consists of dried blood, and is not really putrid. Meat is also used for fining wines; slices of steak are merely hung up in the wine, and their albumen is extracted, causing a precipitate. Most commonly albumen from eggs is used for fining the brandied wines. As a matter of fact, wine is usually fined by means of isinglass; but in *natural* wine a clear liquid may always be produced by bottling, a crust being deposited. In Eastern countries, where the primitive manufacture of wine is still carried on as in the days of Noah, the crushed grapes are merely poured into jars and allowed to ferment, the crushed fruit—or murk—being violently agitated three times a day by means of the hand or a wooden plunger. If a dry wine is required, the husks and stalks are left in; if a fruity wine is needed, they are removed. The dry quality of wine is, therefore, simply a question of the short or prolonged maceration of the husks and stalks of the grape in the fermenting wine; the stones need not be taken into account, as, even after remaining in the wine many months, they are still unchanged. Natural wine thus produced needs no fining. After fermentation has ceased the contents of the jars are run through a coarse filter, and the result, a fluid of the consistence of thin pea-soup, is placed in carboys, and in about three months' time can be drawn off in a perfectly clear condition, all sediment having been deposited. Such is, shortly, the mode of manufacture of the celebrated Shiraz wine, which much resembles a virgin sherry.—*The Saturday Review.*

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Mental Overcharge.—If too sudden and extreme an impression be made on the mind, there is commonly a start or a convulsive movement. That is overcharge, the surplus of vibration cast from the mental into the muscular organization. The motion which looks so alarming is the relief. If there were not that means of relief the vessels of the brain might break, or the heart itself might burst. Sometimes when these parts are weakened they do give way, under shock, and "stroke" or "syncope" brings the life to a close. These are the major overcharges of the mind declared visibly through the body. But, short of these, the health of the mind is too often affected by the effect of minor overcharge, arising, not from sudden vehement shocks, but from little shocks leading to long-continued pressures, which kill the mind in parts or centres or altogether. By this latter process of overcharge the health of the mind is

injured in our day to an extent that probably has never before been reached in our national history. Our schools at this moment are engines of unprecedented power and skill for effecting mental overcharge and all its accompanying evils. Our modes of life in periods of later life, our pressures of business, our struggles for wealth and notoriety, with health and true fame both at a discount, our flying visits hither and thither over the whole surface of the earth without exploring it, our cravings for mental stimulations of every kind and quality, our resolute desire to try once more to scale heaven that we may tear aside the veil that conceals the infinite—these overcharges of mind are momentous in the present crisis of the civilized world. If some of the grosser appetites are reduced, the emotions are more wildly aflame and the reason more at bay. The passions are rising in mighty waves, and the brain is becoming like a troubled sea. Love staggers before hate, jealousy outrides fear, and assurance in equality of mind is so strongly assertive that at the rate we are now going no man will have a chance ere long of being remembered for what he has achieved, save the man who has stunned the world with the record of the most hideous possible crime. Yet with it all there is the gleam of hope that, with knowledge so advanced as it is, there will be developed a more reasonable desire to temper knowledge with wisdom, and to bring the passions, now so wild and furious, into subjection to reason. It is toward methods of teaching that shall lead in the direction of reform in all conditions which affect the health of the mind, that the study of the mind becomes now a part of the duty of the true sanitary scholar. For let me observe that to neglect the mind is also to neglect the body itself. There has been no opportunity in this address to refer to the injuries of a physical kind which follow in the body from mental insalubrity. Under our sanitary skill great plagues are being swept away, and by that sweeping our death-rates are coming down to a figure that is a marvel to the world at large. "Ah!" says the enthusiast, "see you the prophecy is at hand, there shall no more be an infant of days nor an old man that has not filled his days;" for note how the young are ceasing to die, and how the old are continuing to live. It is true, and yet the millennium is not in sight. "For observe," say those of us who are on the watch-towers, "observe how diseases of nervous origin—in other words, of mental origin, diseases like diabetes and cancer, and some forms of insanity, are on the increase! Observe, too, how the social storms, always so mortal when they set in, are showing their premonitory signs in every quarter. There is less death; there is more life. Is there less disease of the mind as well as of the body?" That is the question.—*Dr. Richardson.*

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The Effects of Tight Clothing.—Now that rational ideas as to dress have acquired a definite place in public esteem, it may be imagined that the practice of tight lacing and customs of a like nature, if known at all, are not what they used to be. A case of sudden death lately reported from Birmingham proves that it is still too early to indulge in such illusory ideas. The deceased, a servant girl of excitable temperament, died suddenly in an epileptoid fit, and the evidence given before the coroner respecting her death attributed the fatal issue to asphyxia, due in a great measure to the fact that both neck and waist were unnaturally constricted by her clothing, the former by a tight collar, and the latter by a belt worn under the stays. We have here certainly those very conditions which would lead us to expect the worst possible consequences from a convulsive seizure. There is no organ of the body whose free movement is at such times more important than the heart. Yet here we find, on the one hand, its movement hampered by a tight girdle so placed that it could with difficulty be undone at a critical moment; on the other, a contrivance admirably adapted to allow the passage of blood to the brain, while impeding its return. This is no isolated case as regards its essential character, though, happily, somewhat singular in its termination. Minor degrees of asphyxiation, we fear, are still submitted to by a good many of the self-torturing children of vanity. The tight corset and a high heel still work mischief on the bodies of their devoted wearers. Taste and reason, indeed, combine to deprecate their injurious and vulgar bondage, and by no means unsuccessfully. Still, the evil maintains itself. Cases like that above mentioned ought to, if they do not, open the eyes of some self-worshippers of the other sex who heedlessly strive by such means to excel in a sickly grace. We would strongly impress on all of this class the fact that beauty is impossible without health, and would advise them, in the name of taste as well as comfort, to avoid those methods of contortion, one and all, by which elegance is only caricatured, and health may be painfully and permanently injured.—*Lancet.*

American ozokerite, or natural mineral wax, has at last found its way to our market from Salt Lake City. This will not melt under a temperature of 185 degs., and hence will become of great use in the arts. It presents great resistance to electrical currents, and is acid proof. The makers of blacking and sealing-wax are beginning to use it in its crude form. The refined product, called ceresin, can be sold for one-third the price of bees-wax, and is a complete substitute. The doll-makers and candle manufacturers have already begun to use it. It will soon find its way into the laboratory of the pharmacist.

Woods used in Canes.—No one need complain on the score of variety in the woods used for walking-sticks. About everything procurable and at all suitable has been pressed into service. Most of the woods are from foreign climes. Among the conspicuous sorts are the whangee sticks; they are Chinese products, and prized because of the regularity of their joints. The orange and lemon sticks are always more or less fashionable. We get them from the West Indies and Florida. The orange has a beautiful green bark and odd-looking markings which run the length of the cane. The lemon is rougher, and has prominent knots at regular intervals. Algeria supplies us with myrtle sticks, which are carried by those who admire odd effects. Other imported sticks are ebony, palmetto, rosewood, thorn, cactus, hairwood, partridge, and lots of other woods whose names are already well-known and need not be repeated here. A peculiar stick we get from a species of palm grown in Borneo, and is called rajah; but the celebrated of all palm canes is malacca. It comes from a species of calamus, a slender-growing palm. The strangest part of all is that it does not hail from Malacca, but from a small place on the opposite coast of Sumatra. We do not know why it is called malacca.

Special Notice.—The best stimulant for dietetic and other purposes is the "Skerryvore" (Registered) Blend of Fine Matured Scotch Whiskies, certified of the utmost purity by Mr. E. G. Clayton, F.C.S., Member of the Society of Public Analysts. Sold only by John Twatt, 36, Argyle-place, Edinburgh. Price 20s. per gallon, bottles and cases included.—[Advt.]

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CATARRH.—After all that has been said, it must be admitted that changes in the climate, filth, sewer-gas, malaria, and what not, have much to do with the production of catarrh. Even Fifth Avenue is so filthy half the time as to make us feel disgusted with it. Catarrh, in many cases, is nothing but a filth disease, and Dr. Mackenzie, of London, says that that is the chief cause of catarrh in the United States. He says there is no such thing as scavenging in this country. This is quite true of some places, but there are towns where catarrh prevails which are as well scavenged as any town in England. But it is not New York City. There are cases of catarrh in this city which are undoubtedly kept up by filth, by irritating particles floating in the atmosphere, carried hither and thither by the winds, such as horse dung and fermenting, putrefying substances. Do not consider, then, that any specialty by itself will control the situation. The treatment of the nose may be well enough where it is indicated, but where filth is the cause of catarrh, something more must he done.

THE REMOVAL OF HAIR BY ELECTROLYSIS.—Dr. Richard B. Faulkner, of Allegheny, Pa., writes :—"Now that the use of electrolysis has become so common in the removal of facial blemishes, it seems prudent to advise the exercise of very great care in its application. The face is always a very important part. Should a surgeon accidentally mar its beauty, its financial value, as expressed in a suit for malpractice, cannot be estimated. To do no harm should be our first consideration; and the more important this matter becomes as the more fastidious and aristocratic the bearer of the face happens to be. In the removal of hair, too much electric power, and needles of too large a size, will sometimes occasion minute cicatricial fibroid nodules, distinctly to be felt as little lumps; and I have no doubt will be plainly seen as age advances as elevations upon the lips of those from whom moustaches have been removed. Again, more electric power than just enough to remove the hair intended to be removed will, in proportion, stimulate the growth of other hair in adjacent follicles. Care is always required that the positive current be not used, lest you bore a permanent hole in some fine lady's cheek. In the electrolytic removal of hair, moles, wine-marks, warts, &c., the mildest power that is capable of doing the work is the safest. The tension current is the electrolytic current. And it would be well if all writers would speak of the various cells used, as compared to the standard cell of Daniell. I use the excellent diamond carbon cell. Each cell equal 1·75 Daniell cells. Two to four diamond carbon cells are sufficient to remove hair; two to eight, moles; six to ten, wine-marks. Silver needles are the best conductors, and give the least pain. Cocaine solutions dry upon and crust the surface, and are inappropriate for dermal anæsthesia."

Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* MR. A. P. WATT, THE PUBLISHER, *at the same address.*

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules :—

1. **All questions are answered free of charge in the columns of HEALTH. A limited space only, is available for the insertion of replies each week.**
2. **All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.***
3. **Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.**
4. **Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.**

5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor.*]

[Owing to great pressure on our Correspondence pages, several replies have been crushed out of the present issue. These deferred answers will be given in our succeeding numbers.]

G. FRASER.—Try a vegetable dietary—stewed fruits, apples or oranges, &c., and whole-meal bread, with Scott's Midlothian Oat Flour for supper and breakfast; avoid tea and coffee; take Cascara Cordial, twenty drops in water, or a Tabloid, between meals, once or twice daily. Sponge with cold water each morning; sleep on a hard mattress; take plenty of open-air exercise, and avoid fluids and suppers late at night.

PAT.—Try the following pill:—Extract of aloes, eighteen grains; sulphate of quinine, twelve grains; pil. hydrargyri, six grains; extract of rhubarb, eighteen grains. Mix, and make into twelve pills; one to be taken daily about midday.

CERTUS.—Wash your head once a week with Bayley's Spermaceti Soap (17, Cockspur-street, Pall-mall, London, S.W.) and tepid water, and rub in each alternate morning a little glycerine of borax to the roots. Use a soft brush only.

PULVERMACHER'S

For the speedy Removal of all

PAIN, PARALYSIS, RHEUMATISM,

AND

WASTING DISEASES OF THE NERVOUS SYSTEM.

PAMPHLETS FREE. ADVICE GRATIS.

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ADDRESS—

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194, REGENT-STREET,

LONDON, W.

ESTABLISHED OVER FORTY YEARS.

MOTHER.—The treatment of whooping-cough to which you allude is that of Mobin's—by sulphurous acid. We formerly described it in HEALTH as follows:—A physician expresses the opinion that, if it was carried out in every case, at the end of six months the disease would be unknown. The method used by him is as follows: The patient is in the morning put into clean clothes and removed elsewhere. All his clothes and toys, &c., are brought into the bedroom, and sulphur is burnt upon a few live coals in the middle of the room. The fire is allowed to remain in the room for five hours, and then the windows and doors are thrown open. The child sleeps in the room the same evening. About twenty-five grammes (a little under an ounce) of sulphur to every cubic metre may be burnt; this is equivalent to rather more than ten grains per cubic foot. The room is fumigated in a like manner during the night; the patient practically living in an atmosphere of diluted sulphurous acid gas for some days, while in several cases the process is repeated at the end of a week.

LESLIE.—Messrs. Burroughs, Wellcome & Co., Snow-hill-buildings, London, E.C. They are to be had of any good druggist in your city.

SPINK.—Smear pure laudanum with the fingers over the irritable surface. A useful application is an ointment made by incorporating one part of laudanum with three or four parts of cold cream.

NIBS.—You should try the effect of a liniment rubbed into the parts at bedtime, each night, regularly. Internally, take the following mixture: Iodide of potash, one drachm; aromatic spirits of ammonia, three drachms: syrup of ginger, half an ounce; water, to make up six ounces. Label: "A tablespoonful in water, twice daily, before meals." Write again, if not cured.

A. CALDER.—Read the pamphlet, "A Lecture to Young Men" (post free, 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the directions given therein.

ALASTAR.—Wash the hair twice or thrice weekly for a time with a pint of hot water (soft) in which a piece of lump ammonia the size of a brazil nut and a slightly larger piece of borax has been dissolved. Allow the fluid to cool and use as a wash.

PRENTICE.—Try taking twenty grains bromide of potash dissolved in a wineglass of water at bedtime for a few nights, and note effect of this drug on your symptoms. If not bettered, write again.

B. B. B.—Try the following cooling lotion:—Goulard's Extract, half a drachm; spirits of wine, two drachms; water, eight ounces. Mix. Apply this to the boil constantly on lint.

C. M. M.—Take the following:—Citrate of iron and ammonia, one drachm; syrup of orange-peel, half an ounce; water, eight ounces. Mix. Label: "Two tablespoonfuls to be taken thrice daily, before food."

G. S. A.—The use of arsenic is utterly unadvisable and dangerous, save under medical direction. No druggist would sell arsenic save under a medical prescription.

M. P. B.—Apply to the French Hygienic Society, 56, Conduit-street, W., and they will probably be able to supply you with a harmless hair dye such as you require.

E. PEARCE.—The following mixture might be tried:—Carbonate of ammonia, one drachm; bicarbonate of potass, a drachm and a half; infusion of chiretta, six ounces. A tablespoonful thrice daily, before food.

CORPUS.—Try bathing the face morning and night with light white wine—Hungarian will do; or use the following lotion:—Sulphate of zinc, two grains; compound tincture of lavender, eight minims; distilled water, one ounce. Apply two or three times daily.

E. WHITE.—We have no faith in any such treatment as that you name. If you send us stamped addressed envelope, we will send you name of a specialist.

P. S. E.—Try the following: Carbonate of bismuth, ten grains; wood charcoal, ten grains; bicarbonate of soda, five grains. Mix. One such powder to be taken thrice daily, half an hour before meals, when you are troubled with acidity.

MALMAIN.—Try the following, and see to the clothing: Ammonio-citrate of iron, a drachm and a half; spirit of sal-volatile, three drachms; chloric ether, one drachm; syrup of tolu, three drachms; camphor julep, seven ounces. Label: "Two tablespoonfuls thrice daily, after meals."

BLAIR.—Take plenty of out-door exercise, try a cold or tepid sponge bath each morning; and for a time take Inman's Syrup of the Hypophosphites as recommended in the pamphlet you have read. This tonic will brace you up.

PETER GRAY.—Take a claret glass of Vin Mariani (Roberts & Co., New Bond-street, London, W.) before your meals twice or thrice daily, and try a tepid sponge bath each morning.

A. M.—If acidity is present you may try the following:—Sub-nitrate of bismuth, six grains; carbonate of magnesia, ten grains; powdered gum arabic, twenty grains. Mix to form a powder. stir in a cup of boiled milk, and, when cool, stir up again before being swallowed. To be taken twice daily after food.

S. ANDERSON.—Dry the ear with a little cotton wool, and have blown into it gently, night and morning, a little finely powdered boracic acid. Take also a teaspoonful of Inman's Syrup of the Hypophosphites, in a wineglass of water, twice daily, after meals.

SURGICAL.—A paint for black eyes may be made as follows:—A mixture of bismuth two parts and talc one part, coloured with Armenian bole or calamine to the skin-tint. Apply to the part dry. The part, however, should previously be washed with a mixture of glycerine one part and water five parts.

Tired Brain

Horsford's Acid Phosphate,

A brain food. It increases the capacity for mental labour, and acts as a general tonic. It rests the tired brain, and imparts thereto new life and energy.

Dr. ED. T. JOHNSON, M.R.C.S., 121, Rice-lane, Walton, Liverpool, says: "I have used it with very good results in cases of overtaxed and overworked brains, one in particular, a schoolmaster, where it acted like a charm."

Dr. JNO. LAMBE, M.R.C.S., West Villa, Shurdington, No. Cheltenham, says: "It produced good results in sick headache and brain prostration, tranquillizing the irritation, giving comfortable sleep."

Descriptive pamphlet post-free on application to

Rumford Chemical Works,
Providence, R.I., U.S.A.

Beware of Substitutes and Imitations.

CAUTION.—Be sure the word "Horsford's" is printed on the label. All others are spurious. Never sold in bulk.

ALA.—Try the following gargle: Tannin, one drachm; camphorated water, six ounces. Internally, take the Fer Bravais, fifteen drops, thrice daily.

C. P. P.—Apply to the French Hygienic Company, 6, Conduit-street, London, W. For the rest, see that your general health is good. Take the tonic you name, and note also advice regarding the hair given to "Bixby" in HEALTH, No. 329.

N. G.—A formula for a hair restorative and tonic is as follows:—Bay rum, two drachms; glycerine, two drachms; tinct. cantharides, one drachm; tinct. capsicum, one drachm; quinine, ten grains; water, four ounces. Mix. Keep the hair short, use a soft brush only, avoid hard combs, and wash once a week with Bayley's Soap and tepid water.

G. S. — Avoid constipation, and use simple injections of tepid water thrice daily, to which a very little permanganate of potash has been added—sufficient to tint the water of a delicate pink colour. Take a teaspoonful of Inman's Syrup of the Hypophosphites as a general tonic in a wineglass of water, thrice daily, after your meals.

ENGINEER.—For the constipation, take twenty drops of Cascara Cordial, or two Cascara Tabloids, each night; and use Dahl's Cakes regularly with your breakfast and tea.

ELDER.—To make black hair dye, the following is a method:—Nitrate of silver, four drachms; sodium carbonate, six drachms. Dissolve each in eight ounces of boiling water, mix, collect the precipitate, wash it, and drain. Place in a mortar along with eighty grains tartaric acid, stir, and when effervescence ceases, dissolve in a solution of ammonia, a sufficient quantity, add two drachms each glycerine and mucilage, a little caramel to colour, and water to make up five ounces.

BEAR.—Take twenty drops of Cascara Cordial, once or twice daily, an hour before your food, in water, and when digestive action has thereby been induced, follow up and aid your cure by taking Grant's Oat Flour, stewed fruits (apples and prunes), corn-flour, and like dietary. Avoid tea and coffee as much as possible, and give up taking aperients.

LOUISA.—Give Bayley's Pyrmont Tablets (see advertisement in our pages) a fair trial for the cure of piles. Use, also, Bayley's Ointment. Both are excellent remedies (17, Cockspur-street, London, S.W.).

LEAR.—No, we should not advise you to try any such remedy. The effect would be to further irritate the parts.

PRINCESS. — Try the following cooling lotion:—Goulard's Extract, half a drachm; spirits of wine, two drachms; water, eight ounces. Mix. Apply this to the boil constantly on lint.

P. HAY.—The firm you mention is a notorious American quack one, who pester the public with their offensive literature.

C. ROADES.—According to one authority, at 25 years of age the male human body should weigh on an average 145·6lb., and the female 120·5lb. As regards height, it is calculated that a man of 6 ft. should weigh 178lb., and a man of 5 ft. 6 in., 145lb.

ATTEMPT. — Erasmus Wilson's Hair Wash consists of eau de Cologne, two ounces; tincture of cantharides, two drachms; oil of rosemary and oil of lavender, of each, ten drops. Another stimulating hair wash is: Glycerine, two ounces; tincture of myrrh, one ounce; eau de Cologne, one ounce; tincture of cantharides, half an ounce; and distilled water, twenty-four ounces.

E. JONES.—We have never heard of the firm you name. Apply to the Medical Battery Company, 52, Oxford-street, W.

FRANCIS D.—Messrs. Pulvermacher, 194, Regent-street, London, W., will send you their pamphlet free on application. Write direct to them.

C. EGAN.—The man is a quack. Read the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.).

MAYFAIR.—Use Vinolia as an ointment for your skin-eruption, and wash with Vinolia Soap only and tepid water.

G. O. N.—Take a dose of Lamplough's Pyretic Saline when your headaches begin, and take little flesh-food so long as your symptoms trouble you.

Certain HARNESS' Cure.

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IS THE MOST SIMPLE AND

PERMANENT STOPPING for DECAYED TEETH.

Any one can easily prepare and place it in the cavity of the Tooth in a soft state, and in a short time it becomes a perfectly hard and white Enamel, forming, as it were, a part of the original substance of the Tooth.

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FOR THE TEETH, GUMS, AND BREATH.

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A few drops in water used daily will thoroughly Cleanse, Beautify, and Preserve the Teeth; Polish the Enamel, prevent Tartar, Destroy all living "Animalculæ." It is Absolutely Pure and Harmless to the Youngest child or most delicate constitution.

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